YEAR 9 CURRICULUM PLANS 2022 - 2023

Year 9 Art		
Term 1	**Term 2**	**Term 3**
Project 1 Theme: Structures: Architecture KNOWLEDGE -History of Art, craft, design & architecture-. Students research artists/designers who have used architecture as inspiration., analysing their composition and use of layering and selection. They should discuss the work and try to identify the artistic objectives. MAKING SKILLS- either: 1. One-point perspective and two-point perspective drawings explored. Create towers/ word compositions, room compositions. 2. Designing their own 2D/3D city/room linking to an artist. They will need to select the most interesting pieces of architecture that represent their city and produce a series of quick initial sketches from their research and personal studies. They will create buildings using a range of 2D/3D materials and processes and assemble them. Including drawing, painting textiles, found objects, cardboard sculpture, papier Mache etc. They will need to consider texture and surface finish/detail and how to evaluate own and others work successfully. ARTISTS: Students should research the artists/designers who have used architecture/structures as inspiration, including Delaunay, Piranesi, Jim Edwards, Julian Opie, Hundertwasser, Yin Xiuchen, Archist Cities, Optical Art, Ian Murphy etc.	**Project 1 Theme: Structures: Architecture** Students will continue project into the Spring term. IDEAS- Students should be asked to study a range of architectural landmarks/ architectural features from photographs. They will produce detailed tonal drawings. Students will research architecture from around the world initially, and then focus on a particular city/country when developing their 2D/3D work. EVALUATE-Presentation: Students will plan and present pages with all the responses they have created. This project will highlight the importance of considering the overall presentation of work to reflect the style or theme of a particular project. **Project 2 Theme: Under the Sea** Ideas- Introduction to theme Under the Sea –1. Observational drawings of objects/creatures related to the theme e.g., shells, starfish or coral. Or 2. Fantasy Funny Sea Creature creation- working in threes students design/imagine a fantasy sea creature drawing each part separately i.e., head, body, legs but without seeing what the previous person has designed. Unfold final design to reveal Fantasy funny sea creature. Knowledge: Research an artist who explores Under the Sea as inspiration: Ernst Haeckel, Georgia O'Keeffe, Barbara Hepworth, Andreas Feininger, Sarah Parker-Eaton, Thea Bjerg, Louise Hibbert, Catrin Mostyn Jones.	**Project 2 Theme: Under the Sea** Students will continue project into the summer term. Making: Introduction to basic 3D construction techniques- papier Mache- newspaper and cello tape. In teams/pairs students select an under the sea creature and create the basic form using scrunched, rolled, twisted newspaper and fix together with cello tape. Students use papier Mache techniques to make the structure more solid. The structures to be decorated in abstract colour/texture using tissue paper, string, straws, wool to create texture. Collect objects both 3D forms and in 2D form as inspiration for final pieces. Produce an A2 design board- design a fantasy sea creature/or in sketchbook. Students produce 4 different design ideas individually using 4x4 design concepts. They collate the designs together and produce a final A2 design board that needs to include 1. Initial design ideas, 2. Final design idea, 3. Materials of sculpture4.Size of sculpture, 5. Artists influence, 6. Annotation Introduce wire sculpture techniques, creating texture. Students work from final A2 design board and produce final sculpture using either papier Mache or a wire structure base. Students can use a variety of tissues, cellophane, net fabric etc to complete the sculpture.

Year 9 Computer Science		
Term 1	**Term 2**	**Term 3**
Topics studied: **Exploring Online Issues - My Digital World** • Website Reliability and Quality of Sources of Information • Safe & Effective Searching • Copyright Issues • Online Dangers • Strategies to Stay Safe **Data Representation - Binary Bits & Bobs** • Binary Bits and Bobs • The Binary Number System • Binary – Denary Conversions • Binary Addition • Binary Representation of Text • Binary Representation of Images • Binary Representation of Sound	**Topics studied:** **Visiting CS pioneers and exploring their work – Back to the Future** • Alan Turing and Code Breaking • Tim Berners Lee -HTML & WWW • George Boole and Boolean Logic • Charles Babbage The Difference Engine & Problem Solving **Further Programming – Computational Problem Solving** • Python Inputs outputs and variables • Python Maths • Iteration – For & While Loops • List and Arrays • How it all works and putting it together – Computational Problem Solving (Decomposition/Abstraction/Algorithms)	**Topics studied:** **Webpage technologies – HTML/CSS & Javascript** • HTML and CSS • CSS back grounds and images • Div tags and Page sections • CSS Divisions and layouts **Introduction to Computer Networks** • What is a Network – Advantages & Disadvantages • Introduction to LANS and WANS and the hardware components required. • Practical and Physical networks • Data Packets & the internet • DNS & the Internet

Year 9 Design Technology - Carousel System		
Textiles Technology	**Materials**	**Food Preparation and Nutrition**
The aim of the project is to review the design process. Students will focus on the research and design process that is vital to any product before manufacture. Students will learn how to design for a specific target market and therefore guaranteeing it is aesthetically pleasing to the consumer. There will also be opportunities for students to test and try different fabrics to make sure they are suitable for intended use. • Learn and demonstrate a wide range of textile skills in order to make a textile product. • Demonstrate how to use machinery safely and accurately to carry out a variety of textile process. • Learn about industrial process and how the textile and fashion industry operate. • Understand how the design cycle works in industry. • Understand why it is important to design for a particular function and user in mind. • Understand where materials and components are sourced from.	Students will learn a wide variety of woodworking skills signing and making principles- Students should know and understand that all design and technology activities take place within a wide range of contexts. Students should also understand how the prototypes they develop must satisfy wants or needs and be fit for their intended use. For example, the home, school, work or leisure. Students will need to demonstrate and apply knowledge and understanding of designing and making principles • Specialist techniques and processes. In relation to **at least one** material category or system, students should know and understand the factor of Addition Lamination and Forming-Bending • Specialist techniques and processes In relation to **at least one** material category or system, students should know and understand the use of production aids • Design strategies Explore and develop their own ideas How this can be done using an iterative process including: sketching modelling testing evaluation of their work to improve outcomes. • Develop, communicate, record and justify design • Ideas using a range of appropriate techniques such • as: freehand sketching, isometric and perspective, 2D and 3D drawings, system and schematic diagrams, annotated drawings that explain detailed • development or the conceptual stages of designing	The Food Preparation and Nutrition curriculum will give encouragement and develop the vital skills to store, prepare and cook foods safely. Students will gain an understanding of the ingredients, processes and dishes to allow them to make informed future choices. • Learn and demonstrate a wide range of preparation and cooking skills in order to make a variety of high-quality products. • Demonstrate how to use equipment safely and accurately to carry out a variety of processes. • Understand the wider implications of the food industry; considering moral, social, ethical and environmental concerns. • Understand the restrictions placed upon individuals through diet, health and lifestyle. • Students will learn about the chemical and functional properties of the macronutrients. • Understand the factors that influence food choice **Practical** • How to prepare and make dishes – Students will learn a range of different cooking skills and process, by making a variety of dishes. • Food safety practices – Students will demonstrate how to work safety by following the correct safety and hygiene procedures.

Year 9 English		
Term 1	**Term 2**	**Term 3**
Unseen Poetry – Animal Anthology • Understand how to approach poetry in an analytical way • Develop techniques for exploring poetry and its bigger ideas • Compare poets' key ideas and use language, form and structure **Reading and Writing Fiction: The Gothic** • Read a broad range of gothic texts and understand the key conventions of the genre • Develop analysis of 'unseen' texts • Analyse writers' use of language and structural features, exploring effect • Utilise gothic conventions to construct descriptive and narrative gothic writing	**'Of Mice and Men'** • Understand key elements of plot, characterisation and themes presented in the novel • Analyse Steinbeck's use of language, form and structure and their effect on the reader • Understand key contextual factors of the novel	**Reading and Writing Non-Fiction** • Read a broad range of non-fiction texts and understand the key conventions of different text types, identifying writers' points of view • Develop analysis of 'unseen' texts, including non-fiction texts from the 19th century • Analyse writers' use of language and structural features, exploring effect • Utilise the conventions of different non-fiction texts to produce a range of writing for different purposes and audiences **Introduction to Romeo and Juliet** • Understand the plot, characters and context of the play in preparation for further study at GCSE • Understand the conventions of tragedy and Shakespearean theatre

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Year 9 - French		
Term 1	**Term 2**	**Term 3**
All about me • Revision of family vocabulary and • describing people • Places in town and activities • Talking about what makes a good • friend • Talking about family relationships • Describing a night out using the perfect tense • Talking about how you used to be using the imperfect tense • Discussing role models **Grammar studied** Using irregular verbs in the present tense Using reflexive verbs in the present tense Using the near future tense .	**Free time** • Revision of sport and music vocabulary • Revision of technology, films and TV vocabulary • Talking about sport Talking about your life online • Using comparatives • Talking about books and reading • Talking about favourite TV shows • Talking about actors and films **Grammar studied** Using depuis and the present tense More practice of the imperfect tense Using direct object pronouns Using superlative adjectives	**Special occasions** • Talking about food and meals • Discussing shopping for clothes • Describing daily life • Talking about food for special occasions • Using the pronoun en • Using polite language • Describing family celebrations • Describing festivals and traditions **Grammar studied** Using modal verbs Using venir de + infinitive Using a combination of tenses

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Year 9 Geography		
Term 1	**Term 2**	**Term 3**
<u>GEOPOLITICS</u> <u>HOW IS OUR WORLD INTERCONNECTED AND WHO ARE THE EMERGING SUPERPOWERS?</u> • What is globalisation? • How did the Suez Canal blockage affect global trade? • How does globalisation connect countries around the world? • What are the impacts of fast fashion • What is a superpower? • To what extent ss the USA losing power? • Who are the new emerging economies? • How has the influence of superpowers led to conflict? • How has the growth of economic powers led to environmental issues? • How is economic power being extended through space exploration? • How has the relationship between superpowers and low income countries been changing?	<u>TECTONICS</u> <u>IS OUR WORLD BECOMING A MORE HAZARDOUS PLACE?</u> • What are the factors affecting hazard risk? • How can we explain the distribution of volcanoes and earthquakes? • What happens at plate boundaries? • What are the different types of volcanoes? • Investigating the causes, effects and responses to a volcanic eruption. • Why do people live near volcanoes? • What are the characteristics of supervolcanoes? • What are the causes and characteristics of earthquakes? • How do the effects and responses to earthquakes vary according to level of development? • Can all countries be made earthquake proof? • What are tsunamis and how have they affected people, the environment and the economy?	<u>ECOSYSTEMS</u> <u>WHAT ARE THE CHARACTERISTICS OF TROPICAL RAINFORESTS AND COLD ENVIRONMENTS?</u> • Explain the interrelationship within the natural system. • Define and give UK examples of producers consumers, decomposer, food chain, food web and nutrient cycle • Explain the interdependence of each of the above and explain how changes might affect each other. • Describe the distribution and characteristics of global ecosystems around the world. **TROPICAL RAINFORESTS** • Describe the physical characteristics • Explain the interdependence of the climate, water, soils, plants, animals and people • Explain how plants and animals have adapted to the physical conditions • Describe and explain the problems and issues with changing biodiversity • Describe and explain the changing rates of deforestation. • Use a case study to explain the causes of deforestation • Use a case study to explain the impacts of deforestation • Explain the importance and value of the tropical rainforest on a local, national and international scale. • Explain why it is important it should be managed sustainably. • Explain how it can be managed sustainably • International agreements about the use of tropical hardwoods, **COLD ENVIRONMENTS** • Describe the physical characteristics of the tundra. • Explain the interdependence of the climate, water, soils, plants, animals and people • Explain how plants and animals have adapted to the physical conditions • Describe and explain the problems and issues with changing biodiversity • Use a case study (The Arctic) to illustrate development opportunities in cold environments and the challenges • Explain the value of wilderness areas and explain why they need protecting • Explain how strategies can be used to balance the needs of economic development and conservation

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Year 9 History		
Term 1	**Term 2**	**Term 3**
<u>WW2</u> • Causes, Long-Term and Short-Term, Changing tactics e.g. Blitzkrieg- the Blitz, Poland, Battle of Britain, Aerial Bombing, Dunkirk • Impact on the Home Front-evacuation, Hiroshima and Nagasaki <u>French Revolution</u> • The Ancien Regime-What caused the Revolution? • Events • The Terror • Napoleon • Significance <u>Holocaust</u> • Life for Jewish people in Europe before WW2 • The rise of the Nazi party • Life in Nazi Germany and the start of Jewish persecution Continued in Term 2	• Ghettos • Why did the Holocaust happen? • What has been lost in the Holocaust? <u>Cold War</u> • How tensions developed between USA and USSR after WW2. • NATO and the Warsaw Pact. • Berlin Blockade, into Kennedy's presidency with the Berlin Crisis and the Berlin Wall, the Space Race. • End of the Cold War and fall of the Berlin Wall <u>20th Century USA</u> • <u>Political change-</u>Republican Presidents, Prohibition, Roosevelt • <u>Social change</u> - The 'Roaring Twenties'- lifestyles, culture and fashions, gangsters, civil rights protests and development Continued in Term 3	• <u>Economic change</u> – economic boom and bust - Development of the car industry-Wall Street Crash and Economic recovery with the New Deal <u>Post War USA</u> • Role of USA in WW2 • McCarthyism • Civil Rights • Vietnam War. <u>1960s Britain-did the 60s swing?</u> • Swinging Sixties • Youth Culture • Protest • Poverty and Prosperity • Migrant communities.

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Year 9 Maths		
Term 1	**Term 2**	**Term 3**
• Rounding, estimating calculations and error intervals • Standard form, indices and surds • Working with decimals and percentages • Constructions and scale drawings • Circles	• Further algebra • Congruence and similarity • Pythagoras' theorem • Trigonometry	• Probability - tables and diagrams • Linear graphs • Graphical simultaneous equations • Quadratic graphs • Other graphs • Algebraic methods for solving simultaneous equations

***To promote greater understanding in KS4 music, all units of work link to the areas of study as set out in the Edexcel GCSE specification.**

Year 9 Music		
Term 1	**Term 2**	**Term 3**
Vocal Music and Instrumental Music Students learn to read, write and perform vocal and instrumental music using notation. All students should be able to understand and use the notation outlined in year 8, and in addition be comfortable with the occasional use of semiquavers at a moderate tempo. Recognise the elements of music and how they are used to shape compositions. Compare and contrast music taken from a range of classical, pop, jazz and musical theatre music. All students should be able to identify elemental concepts specified in year 8, and in addition identify the rhythmic concepts monorhythm and polyrhythm, and identify instrumental families from World music.	Instrumental Music and Music for Stage and Screen Read, write and perform instrumental music in a range of Classical and Musical Theatre styles using notation. All students should be able to understand and use the notation specified in term 1, and in addition be comfortable with the use of dotted quaver-semiquaver patterns at a moderate tempo. Students will be more comfortable performing in bass clef and be able to identify how it links in pitch to treble clef. Recognise and identify the key features of the different classical periods in music and how composers' styles have developed since 1150. Explore how music is used in Musical Theatre to create atmosphere and enhance the impact of the drama. Compare and contrast music in a wide range of Classical Music styles (particularly music taken from baroque, classical and romantic periods) and how they influence contemporary composers in a variety of popular and classical styles. Compare and contrast music in a wide range of Musical Theatre styles, (particularly music from traditional musicals, mega-musicals, jukebox musicals, and cultural musicals).	Fusion Music and independent performance projects. Read, write and perform Latin-Jazz Fusion music using basic notation. All students should be able to understand and use the notation specified in term 1 and 2, and in addition be comfortable with the occasional use of triplet crotchets and quavers. Students will understand chord diagrams and begin to incorporate barre chords into their repertoire on the guitar and ukulele, though they may lack fluidity when compared with standard chords. Recognise and identify the way in which different musical genres are combined to create fusion styles. Compare and contrast a wide range of fusion styles including samba, club-dance and bhangra

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Year 9 PE		
Term 1	**Term 2**	**Term 3**
• Rugby • Netball • Basketball • Cross country • Balances and Trampolining • Fitness testing • Table tennis	• Balances and Trampolining • Fitness testing • Table tennis • Tennis • Athletics • Cricket	• Tennis • Athletics • Cricket

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Year 9 RE		
Term 1	**Term 2**	**Term 3**
St. Mark's Gospel: The Identity of Jesus • The titles of Jesus • Jesus' baptism • Peter's confession • The Transfiguration • Jesus' Miracles **St. Mark's Gospel: Death and Resurrection** • The plot to kill Jesus • The significance of the Last Supper • Prayer in the Garden • Jesus' betrayal, arrest and trial • Jesus' crucifixion and death • Jesus' resurrection	**Marriage and the Family Life** • The purpose of marriage in Roman Catholic Christianity (including sex outside of marriage) • Christian attitudes towards divorce • Christian attitudes towards homosexuality • Roman Catholic teaching on family life and children • Christian attitudes towards contraception • How an issue from Marriage and the Family Life has been presented in the media and whether this treatment is fair to religious people **Matters of Life and Death** • Why do Roman Catholics believe in life after death? • Non-religious reasons for belief in life after death • What is the nature of abortion and why is abortion such a controversial issue? • What is the nature of euthanasia and why is euthanasia such a controversial issue? • What are the causes of world poverty? • How and why is CAFOD trying to end world poverty?	**The Abrahamic Faiths** • What do Jews believe that God is like? • What do Jews believe about God as a Lawgiver and Judge? • What is Shekinah and why is it important? • What is the Mashiach? • What do Orthodox and Reform Jews believe about the nature of the and role of the Messiah? • What is the Abrahamic Covenant and why is it important? • What is the Covenant with Moses at Sinai and why is it important? • Why are the Ten Commandments important to Jews? • What do Jews believe about the sanctity of life? • What are the 613 mitzvot and what is the relationship between the mitzvot and free will? • What are Orthodox Jewish beliefs about life after death? • What are Reform Jewish beliefs about life after death? **The Abrahamic Faiths: Part II** • How do Orthodox and Reform Jews worship in the synagogue? • How do Jews worship in the home? • What are the features of a synagogue in Britain? • How do British synagogues work to serve Jewish communities in Britain? • How are the Tenakh and the Talmud significant in Jewish daily life? • How does a Jew keep Kosher in Britain? • What is Brit Milah? • What is Bar Mitzvah? • What are the different views of Bat Mitzvah and Bat Chayil? • What are the features of a Jewish marriage ceremony? • How do Jews mourn for the dead? • What is Rosh Hashanah and Yom Kippur? • What is Pesach and Sukkot?

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Year 9 Science

Term 1

Biology

Cells
Cell structures and ultra-structures for prokaryotes and eukaryotes, building an appreciation of the theory of evolution of life with one common ancestor.
Introduction to the electron and light microscopes, including their importance for our rapidly increasing understanding of the Biological world.
Bacterial cells and how they reproduce.
Stem cells alongside their potential in therapies and the associated ethical dilemmas.

Genetics
Structure and function of the genome as the instructions for all life. The core principles of inheritance and variation.

Chemistry

Atoms and the Periodic Table
The history of the atomic model, the scientific processes used to develop the modern atomic model and the electron structures of smaller atoms.
Investigate how chromatography, evaporation, filtration and distillation are used to separate various mixtures.
The development of the periodic table, and the importance of the periodic table in predicting and understanding chemical properties. The properties of groups 0, 1 and 7 will be investigated alongside learning to understand trends in reactivity and chemical reactions between the groups.

Physics

Energy
Describe the concept of energy and energy transfers using diagrams for a range of examples. Each type of energy store and transfer is studied and understood before students progress to understanding and calculating efficiency.
Renewable and non-renewable energy resources and the benefits and drawbacks of each.
Investigating insulation.

Electricity
Mains electricity and domestic wiring, this includes developing an understanding of wiring a plug and the risks involved with live wires.
Calculate electrical power.
Static electricity, electric fields and phenomena relating to these.

Term 2

Biology

Infection and Response
The major categories of disease (communicable and non-communicable) before studying communicable diseases and their associated pathogens in (sometimes gruesome!) detail, including some that can only affect plants.

Biological Systems
This is one of the most relatable and exciting topics on the Y9 calendar! The structures of the heart and lungs with highly anticipated dissections and demonstrations.
We then study enzymes and their under-appreciated role in all life and many medical treatments.

Chemistry

Chemistry of the atmosphere
How the atmosphere was initially created and an understanding of the processes that have caused changes in the atmosphere.
Cause and impact of various pollutants and evaluation of the methods of reducing carbon footprint.

Physics

Magnetism
Describe magnetic materials and compare permanent to induced magnets. Investigate solenoids and factors affecting the strength of electromagnets.
Uses of electromagnets

Matter
The particle model of matter, a fundamental concept in Science, is studied in detail here. The states of matter and transitions between each state, which links to energy stores and transfers. Calculate density of different substances and learn a practical method of how to determine density of different objects.
Gas pressure relating to the particle model.

Forces
We will build upon Y7 and Y8 learning about Newtonian physics, including contact and non-contact forces, resultant forces, and work done. Investigate the relationship between force and extension for springs.

Term 3

Biology

Plants
Plants and the process they have evolved to perform are essential for our existence – in this term, pupils will begin to understand why in more detail than in previous years. With strong links to Chemistry, students learn about the reactions of photosynthesis and how plants accumulate the raw ingredients to perform it along with how they are able to always get the substances that they need.

Ecology
In the final year 9 module students look at the interaction between organisms within ecosystems (food webs), and how those interaction shape the organisms themselves. This builds toward Natural Selection, a backbone of modern Biology that is taught in detail in year 10.

Chemistry

Resources
Students will learn to consider the environmental impact of products and will learn how to carry out life cycle assessments. Students will also study the processes and methods involved in creating potable water. Students will gain an understanding of wastewater treatments and the importance of clean drinking water.

Physics

Forces
The forces topic continues into term 3. Students learn to distinguish between contact and noncontact
forces and scalar and vector quantities. They learn how to calculate the weight of an object and the difference between weight and mass.
Moments, levers and gears.

Waves
Students learn how to distinguish between transverse and longitudinal waves, including examples and their uses. This includes a detailed understanding of the electromagnetic spectrum and its properties.
Lenses and reflection and refraction of waves in more detail.